REMARKS

[0002] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. The status of the claims is as follows:

- Claims 1, 2, 4, 6-12, 14-18, 20-22 and 24, 25, 36 and 37 are currently pending;
- Claims 26-35 are canceled herein; and
- New claim 37 is added herein.

[0003] Furthermore, new claim 37 is fully supported by the Application, and therefore does not constitute new matter. Support for this new claim is found in the specification at least at paragraph [0058] in light of Fig. 5.

Cited Documents

[0004] The following documents have been applied to reject one or more claims of the Application:

- Thompson: Thompson, et al., U.S. Patent Application Publication No. 2003/0099364
- Pinckney: Pinckney III, et al., U.S. Patent Application Publication No. 2002/0161911

Claims 1, 2, 4, 6-12, 14-18, 20-22, 24, 25, and 36 Are Non-Obvious Over Thompson in view of Pinckney

[0005] Claims 1, 2, 4, 6-12, 14-18, 20-22, 24, 25, and 36 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Thompson in view of Pinckney. Applicant respectfully traverses the rejection.

Independent claims 1, 7, 11, 21 and 36

[0006] Independent claim 1, as previously presented, recites (in part with emphasis added):

> storing the plurality of temporally non-contiguous portions of the received streaming media file in a single cache file on the client device, wherein the act of storing comprises:
>
> creating a plurality of media cache streams, each media cache stream being associated with a unique bit rate;
>
> storing the first non-contiguous portion in a media cache stream associated with the bit rate of the first non-contiguous portion;
>
> storing the second non-contiguous portion in a media cache stream associated with the bit rate of the second non-contiguous portion; and
>
> ***storing the media cache streams in the cache file.***

[0007] In rejecting claim 1, the Office admits that:

> Thompson does not explicitly show:
> - a third non-contiguous portion comprising audio data (insofar as Thompson only shows various portions of "video" files, and does not explicitly indicate that the "video" files also include audio data);
> - creating a plurality of media cache streams, each media cache stream being associated with a unique bit rate;
> - storing the first non-contiguous portion in a media cache stream associated with the bit rate of the first non-contiguous portion;

- storing the second non-contiguous portion in a media cache stream associated with the bit rate of the second non-contiguous portion; and
- storing the media cache streams in the cache file.

(Office Action 01/25/2010 at page 5).

[0008] The Office then cites Pinckney and alleges that Pinckney shows all of the above features, citing FIGS. 9-10 and par. [0055]-[0058] of Pinckney. Applicant respectfully disagrees. In particular, the feature "storing the media cache streams in the cache file" as recited in claim 1 is not disclosed or suggested in Pinckney.

[0009] For discussion purposed, Applicant reproduces FIG. 10 of Pinckney below:

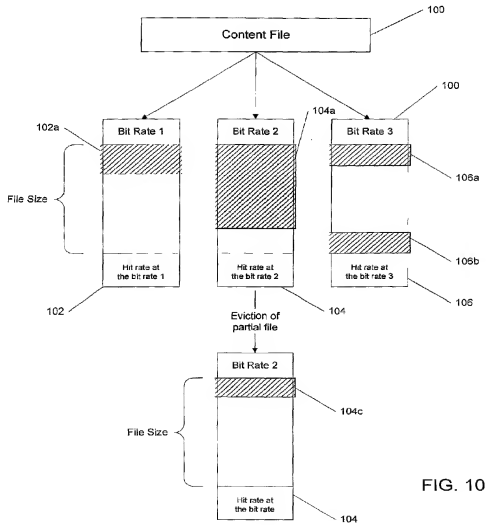

FIG. 10

[0010] Further, Pinckney in paragraph [0058] discusses FIG. 10 as follows::

> [0058] Referring now to FIG. 10, a number of files 102, 104, 106 were shredded from a content file. Each file 102, 104, 106 is adapted for a specific bit rate (n=1, 2, 3) and characterized by a "hit rate" which is updated periodically. Initially, an entire file may have been cached. ***After a period of time, content of the cache is purged to make room in the cache***. According to an embodiment of the invention, however, ***instead of the entire streamed file, only a portion of a file 102, 104, 106 is evicted from the cache***. As depicted in FIG. 10, file portion 102a of file 102, file portion 104a of file 104, and file portions 106a, 106b of file 106 remain in the cache. ***After a certain time period has passed with little interest in the file 104 past the beginning portion of the file, the intermediate portion will also be purged from the cache, with only the beginning portion 104c remaining in the cache for future streaming***. The criteria used by the SDA for cache eviction will now be described.
> (Pinckney at paragraph [0058]).

[0011] In light of the above-reproduced portions of Pinckney, Applicant respectfully asserts that the feature "storing the media cache streams in the cache file" as recited in claim 1, is not disclosed or suggested in Pinckney. Pinckney in paragraph [0058] and FIG. 10 merely discloses an eviction policy for purging a certain portion of the file out of cache memory. Pinckney, however, is completely silent with regard to "storing the media cache streams in the cache file."

[0012] Accordingly, independent claim 1, as previously presented, is patentable over Thompson in view of Pinckney (assuming for the sake of arguments that these references can even be combined).

[0013] Independent claim 7 recites, in part, "storing each of the media cache streams in a single cache file." Independent claim 11 recites, in part, "store the byte cache index

segments and the byte cache data segments in the cache file." Independent claim 21 recites, in part, "storing the audio and video media cache streams in a cache file." Independent claim 36 recites, in part, "storing the media cache streams in the cache file."

[0014] Thus, independent claims 7, 11, 21 and 36 are also patentable over Thompson in view of Pinckney for reasons similar to those provided above with regard to claim 1.

Dependent Claims 2, 4, 6, 8-12, 14-18, 20, 22, 24, 25

[0015] Claims 2, 4, 6, 8-12, 14-18, 20, 22, 24, 25 ultimately depend from one of independent claims 1, 7, 11, 21 and 36 respectively. As discussed above, each of claims 1, 7, 11, 21 and 36 is patentable over the cited documents. Therefore, claims 2, 4, 6, 8-12, 14-18, 20, 22, 24, 25 are also patentable over the cited documents of record for at least their dependency from a patentable base claim. These claims may also be patentable for the additional features that each recites.

New claim 37 is Non-Obvious Over Thompson in view of Pinckney

[0016] New claim 37 recites (in part):

> storing the first media cache stream and the second media cache stream in a single cache file, wherein the single cache file comprises data identifying the first media cache stream and the second media cache stream in the single cache file.

[0017] As discussed above, neither Thompson nor Pinckney (assuming for the sake of arguments that these references can even be combined) discloses, teaches or

suggests the above feature. Thus, independent claim 37 is patentable over Thompson in view of Pinckney.

[0018] Furthermore, independent claim 37 recites (in part with emphasis added):

> ***detecting, at the client device, that a change in the bandwidth occurs in the network connection between the client device and the remote server device***;
>
> receiving, ***based on the changed bandwidth of the network connection***, a plurality of second portions of the streaming media file from the remote server device via the network connection, wherein the plurality of the second portions of the streaming media file is encoded at a second bit rate different from the first bit rate and ***is selected for transmitting to the client device based on the changed bandwidth of the network connection between the client device and the remote server device***

[0019] Applicant respectfully asserts that the above feature is not disclosed or suggested in Thompson or Pinckney.

[0020] Pinckney provides:

> [0055] As illustrated in FIG. 9, in an exemplary shredding process, the SDA receives a source content file 910 from a content provider ***and "shreds" the source content file 910 into a number of exemplary contiguous files 920, 930, 940 that are available for streaming to end-users and have different file characteristics, such as different bit rates, different language audio tracks, different video resolution and the like***. The original exemplary content file 910 can have a stream header 914 and presentation units 912 containing different exemplary content file packets 1, 2, 3, and 4. As seen from FIG. 9, for the particular piece of content, the streamed files 920, 930, 940 represent contiguous subsets of the content file 910. The streamed files 920, 930, 940 can also include stream headers 924, 934, 944 representing, for example, different network protocols for connection to the end users, and respective presentation units 922, 932, 942 with network headers 926, 936, 946 and payload data packets 1, 2, 3, 4. These subsets can be rated, as

> mentioned above, in terms of their streaming characteristic, in particular their streaming bit rate.
> (Pinckney, paragraph [0055], emphasis added).

[0021] Thus, Pinckney merely mentions that the source content file is shredded into a number of exemplary contiguous files that are available for streaming to end-users and have different file characteristics. Pinckney, however, is silent with respect to the emphasized feature recited in claim 37 as follows:

- detecting, at the client device, that a change in the bandwidth occurs in the network connection between the client device and the remote server device;
- receiving, based on the changed bandwidth of the network connection, a plurality of second portions of the streaming media file from the remote server device via the network connection,
- the plurality of the second portions of the streaming media file is encoded at a second bit rate different from the first bit rate and is selected for transmitting to the client device based on the changed bandwidth of the network connection between the client device and the remote server device.

[0022] Thompson does not remedy the deficiency of Pinckney. In fact, Thompson is completely silent with respect to the above emphasized features recited in claim 37.

[0023] Thus, independent claim 37 is also patentable over Thompson in view of Pinckney.

Conclusion

[0024] For at least the foregoing reasons, all pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application.

[0025] If any issues remain that would prevent allowance of this application, Applicant requests that the Examiner contact the undersigned representative before issuing a subsequent Action.

Respectfully Submitted,

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